

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): ~~Process~~ A process for non-coherent reception of a signal with spectrum spreading and DP (Differential Phase)-MOK (M-Ary Orthogonal Keying) mixed modulation ~~with combination of~~ over multiple paths, ~~characterized in that it~~ said process comprising ~~comprises the following operations:~~

~~A)~~ processing the signal ~~is processed~~ in several M channels in parallel; in each channel, the signal is filtered by a filter adapted to a pseudo-random sequence specific to the channel; ~~the~~ energy of the filtered signal is measured; ~~this said~~ energy is weighted by a weighting factor; ~~the a~~ channel containing ~~the a~~ weighted signal with ~~the a~~ highest power is determined; ~~the a~~ number of ~~this the highest power~~ channel is decoded to reproduce ~~the~~ first information symbols (mMOK);

~~B)~~ selecting the filtered signal with the highest energy power ~~is selected~~, a differential phase demodulation is made of ~~this said selected filtered~~ signal ~~which produce~~ to produce multiple correlation peaks corresponding to multiple paths; ~~the energy of these~~ the multiple correlation peaks is calculated; ~~this said~~ energy is weighted by ~~the said~~ weighting factor to provide weighted energy; ~~this said~~ weighted energy is decoded to restore ~~the~~ second information symbols (mDP);

~~C)~~ determining an ~~the average of the correlation peaks is taken~~ over a determined duration corresponding to several information symbols, ~~this said~~ average forming ~~the said~~ weighting factor ~~acting on the energy of the filtered signal in each channel and on the energy of the correlation peaks.~~

Claim 2 (Currently Amended): ~~Non-coherent~~ A non-coherent receiver for a signal with spectrum spreading and DP-MOK mixed modulation ~~to make use of this process according to claim 1, characterized in that it comprises~~ comprising:

A) several M channels in parallel, each channel comprising a filter (201, ..., 20M) adapted to a pseudo-random sequence specific to the channel; a circuit (211, ..., 21M) for measuring the energy of the filtered signal; a circuit (221, ..., 22M) for weighting this energy by a weighting factor; means (230) ~~of~~ for determining the channel that contains the weighted signal with the highest energy; a MOK decoder (250) receiving the number of this channel, and in response restoring ~~the~~ first information symbols (mMOK);

~~B)~~ means (240) ~~of~~ for selecting the filtered signal with the highest energy; a differential phase demodulator (260) which produces multiple correlation peaks corresponding to multiple paths; a circuit (130) for weighting the energy of the correlation peaks by the said weighting factor; a PSK decoder (270) restoring ~~the~~ second information symbols (mDP); and

~~C)~~ means (265) ~~of~~ for calculating the average energy of the correlation peaks over [[a]] the determined duration corresponding to several information symbols, this average forming the said weighting factor, the output of ~~these~~ the means for calculating the average energy means (265) being connected to the weighting circuits (231, ..., 22M) of the various M channels and the circuit (130) for weighting the energy of the correlation peaks.